

REPORT ON BOILERS.

No. 16426

Received at London Office MON. 20 JUL 1925

Date of writing Report 16th July 1925 When handed in at Local Office 10 Port of HAMBURG
 No. in Survey held at HAMBURG Date, First Survey 28th July 1924 Last Survey 29th June 1925
 on the Steel Truss S.S. Motor V. "AMERIKALAND" (Number of Vents 10) Gross 10339
 Tons 4372
 Built at HAMBURG By whom built DEUTSCHE WERKE A.G. Yard No. 50 When built 1925
 Engines made at BERLIN By whom made A.E.G. TURBINENFABRIK Engine No. 173-174 When made 1925
 Boilers made at BERLIN By whom made A.E.G. TURBINENFABRIK Boiler No. 119 When made 1925
 Owners F. & L. EROSTROM & SON Port belonging to GOTHENBURG

VERTICAL DONKEY BOILER.

Made at Hamburg By whom made Deutsche Werke A.G. Boiler No. 119 When made 1925 Where fixed upside down a/c
 Manufacturers of Steel Guss- & Schmiedewerke A.G. - Oberhausen
 Total Heating Surface of Boiler 15.19 m² Is forced draught fitted yes Coal or Oil fired oil fired
 No. and Description of Boilers 1 vertical cross tube Donkey boiler Working pressure 8 kg/cm²
 Tested by hydraulic pressure to 22.1 kg/cm² Date of test 23.10.24 No. of Certificate 357
 Area of Firegrate in each Boiler 2.1 m² No. and Description of safety valves to each boiler 2 spring loaded
 Area of each set of valves per boiler 1222 cm² Pressure to which they are adjusted 8 kg/cm² Are they fitted with easing gear yes
 State whether steam from main boilers can enter the donkey boiler no Smallest distance between boiler or uptake and bunkers 24.5 m
 Is oil fuel carried in the double bottom under boiler no Smallest distance between base of boiler and tank top plating 1.5 m
 Is the base of the boiler insulated no Largest internal dia. of boiler 1550 mm Height 3100 mm
 Shell plates: Material Steel Tensile strength 41-47 kg/cm² Thickness 11.5 mm
 Are the shell plates welded or flanged flanged Description of riveting: circ. seams end 4p single long. seams 1p double
 Dia. of rivet holes in circ. seams 20 mm Pitch of rivets 50 mm Percentage of strength of circ. seams plate 60% of Longitudinal joint plate 70%
 Working pressure of shell by rules 8.5 kg/cm² Thickness of butt straps outer 11.5 mm inner 11.5 mm
 Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished partial spherical Material Steel
 Tensile strength 47 kg/cm² Thickness 17 mm Radius 1800 mm Working pressure by rules 9.2 kg/cm²
 Description of Furnace: Plain, spherical, or dished crown dished partial spherical Material Steel Tensile strength 45 kg/cm²
 Thickness 16.5 mm External diameter top 1300 mm Length as per rule 1750 mm Working pressure by rules 8.05 kg/cm²
 Pitch of support stays circumferentially 1700 mm and vertically 1700 mm Are stays fitted with nuts or riveted over yes
 Diameter of stays over thread 1700 mm Radius of spherical or dished furnace crown 1700 mm Working pressure by rule 8.9 kg/cm²
 Thickness of Ogee Ring 16.5 mm Diameter as per rule 1550 mm Working pressure by rule 7.9 kg/cm²
 Combustion Chamber: Material Steel Tensile strength 41-47 kg/cm² Thickness of top plate 11.5 mm
 Radius if dished 1800 mm Working pressure by rule 9.2 kg/cm² Thickness of back plate 11.5 mm Diameter if circular 1800 mm
 Length as per rule 1750 mm Pitch of stays 1700 mm Are stays fitted with nuts or riveted over yes
 Diameter of stays over thread 1700 mm Working pressure of back plate by rules 8.9 kg/cm²
 Tube Plates: Material Steel Tensile strength 41-47 kg/cm² Thickness 11.5 mm Mean pitch of stay tubes in nests 1700 mm
 Pitch in outer vertical rows 1700 mm Dia. of tube holes FRONT 1550 mm BACK 1550 mm
 Working pressure by rules 8.05 kg/cm²
 Orders to combustion chamber tops: Material Steel Tensile strength 41-47 kg/cm²
 Depth and thickness of girder at centre 1700 mm Length as per rule 1750 mm
 Distance apart 1700 mm No. and pitch of stays in each 1700 mm Working pressure by rule 8.9 kg/cm²



REPORT ON BOILERS

Crown stays: Material _____ Tensile strength _____ Diameter { at body of stay, _____
or _____
over threads _____

No. of threads per inch _____ Area supported by each stay _____ Working pressure by rules _____

Screw stays: Material _____ Tensile strength _____ Diameter { at turned off part, _____
or _____
over threads _____ No. of threads per inch _____

Area supported by each stay _____ Working pressure by rules _____ Are the stays drilled at the outer ends _____

Tubes: Material _____ External diameter { plain _____ Thickness { _____
stay _____

No. of threads per inch _____ Pitch of tubes _____ Working pressure by rules _____

Manhole Compensation: Size of opening in shell plate 300 x 400 mm. Section of compensating ring 550 x 650 x 15 mm. No. of rivets and diam. _____
of rivet holes 24 - 20 mm. Outer row rivet pitch at ends 140 mm. Depth of flange if manhole flanged _____

Uptake: External diameter 470 mm. Thickness of uptake plate 10 mm.

Cross Tubes: No. 4 External diameters { 286 mm. Thickness of plates 8 mm.

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with Yes.

is a correct description,
DEUTSCHE WERFT
AKTIENGESELLSCHAFT.
Friedrich Götts Manufacture

Dates of Survey { During progress of work in shops - 28/7-18/8-6/9-17/10-22/10/24 Is the approved plan of boiler forwarded herewith Yes
while building { During erection on board vessel - 28/5-4/6-10/6-26/6-29/6/25 (If not state date of approval.)
Total No. of visits 10

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This Donkey Boiler has been found in accordance with the approved plan, the Society's letter E.29.5.23, and otherwise in accordance with the requirements of the Rules, and the material and workmanship are of good quality. The materials used in the construction is made at works recognized by the Committee and approved by the Surveyor to the Society in accordance with the requirements of the Rules. The Donkey Boiler was found to be sound & tight and proved no weakness when tested by hydraulic pressure to 221 lbs. per sq. inch. Under steam it was found tight, and is eligible in my opinion for registration: N.D.B.-6.25"*

MARK ON BOILER.

N^o 357
LLOYD'S TEST.
221 lbs
W.P. 114 lbs
R.W. 23. 10. 24.

THICKNESS OF STEEL WORKS.
Form. 16.5 mm Rf. 15.5 mm

Survey Fee Placed for the Report When applied for, _____ 19
Travelling Expenses (if any) Machine. When received, _____ 19

Friedrich Götts
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 24 JUL 1925**
Assigned _____